

**DEPARTMENT OF TRANSPORTATION**

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May 25, 1993

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY**MAY 26 1993****FCC MAIL BRANCH**

Ms. Donna Searcy, Secretary  
Federal Communications Commission  
1919 M Street  
Washington, DC 20554

Dear Ms. Searcy:

Pursuant to Section 1.415 of Federal Communications Commission Rules and Regulations, we are submitting the attached original comments and nine copies in response to the Notice of Inquiry PR Docket 92-235, "Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them".

The Commission's attention to this response will be appreciated.

If you have any questions regarding our submittal, you may wish to have your staff contact Mr. Dan Johnson at (916) 654-7273.

Sincerely,

GARY ADAMS, Chief  
Office of Telecommunications

**Attachments**

cc: DJohnson  
GNash

BW:tc

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MAY 26 1993

Before the  
Federal Communications Commission  
Washington, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

MAY 26 1993

FCC MAIL BRANCH

In the Matter of

)  
)  
) Replacement of Part 90 by Part 88 to  
) Revise the Private Land Mobile Radio  
) Services and Modify the Policies  
) Governing Them

PR Docket 92-235

COMMENTS OF THE  
CALIFORNIA DEPARTMENT OF TRANSPORTATION  
OFFICE OF TELECOMMUNICATIONS

Gary Adams, Chief

Before the  
Federal Communications Commission  
Washington, D. C. 20554

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Revise the Private Land Mobile Radio )

PR Docket 92-235

Services and Modify the Policies )

Governing Them )

To: The Commission

Comments

The California Department of Transportation respectfully submits these comments in the Commission's Notice of Proposed Rule Making in the above-captioned proceeding.

This Department's responsibility to the public for the operation of a safe, efficient, and effective transportation system depends greatly upon availability and control of our communications resources and equipment. Radio communications is an important resource to improve the productivity for our workforce to reduce the cost of highway maintenance and construction, but yet maintain safety for the vast number of highway users in California.

Our communications systems are often used by crews responding to natural and man-made disasters. We must therefore, maintain total control of these systems in order to minimize the loss of life and damage to property, both public and private.

The Intelligent Vehicle Highway Systems (IVHS), Travelers' Information Stations (TIS), Changeable Message Signs (CMS), and Automatic Vehicle Monitoring (AVM) Systems represent other areas where radio technology will assist the management and operation of an integrated transportation system.

#### Position Statement

The California Department of Transportation commends the Commission on undertaking this important proceeding. We would, however, offer the following comments:

##### Channel Spacing

The Department supports the concept of creating narrow band channels from existing channels, but opposes the proposal to reduce the occupied bandwidth by January 1, 1996.

We recommend that the technology for the new channels be tested and proven to deliver a quality of service and operating protocols that is required for our operations at a price that is competitive. The Commission should not mandate the use of any technology before viable commercially available equipment has been type accepted and is being delivered.

It should be understood that any new mandated technology for the Department to implement would be prohibitively expensive, unless the implementation was over a period of 15 years.

### Public Safety Radio Service

The Department wishes to express our opposition to any consolidation of the six public safety services into a single service.

The current radio services were established because the Commission recognized that radio users and uses vary according to the function or mission of each group or service.

The consolidation of these services will result in a nonrepresentative entity making frequency allocation recommendations for the Highway Maintenance Radio Service user in general, and our Department in particular.

### Frequency Coordination

The American Association of State Highway and Transportation Officials (AASHTO) has been certified as the National Frequency Coordinator for the Highway Maintenance Radio Service by the Federal Communications Commission (FCC). As it has through over 40 years of frequency coordination, it continues to rely heavily on a network of local coordinators. There is a designated local coordinator for highway maintenance frequencies in each of the 52 AASHTO member department who possess the technical knowledge and is familiar with local propagational characteristics necessary for proper coordination of the

sought when it authorized interservice sharing and supports the multiple coordinator concept. One can safely assert that multiple coordinators are not detrimental to effective spectrum management.

The loss of this knowledge and expertise for the sake of consolidation would, in our estimation, not be in the public's interest.

#### Transmitter Power/Antenna Height

The application of the Commission's proposed reduced effective radiated power (ERP) and height above average terrain (HAAT) limits is a potentially devastating recommendation. While the proposal to limit radiation to the necessary coverage area is commendable, the method as proposed has the potential to adversely effect the performance of some radio systems. The area of operation of the complete system needs to be considered. Limiting the ERP and antenna HAAT to signal field strength at the outer geographic limit of the system would be the better method of obtaining adequate communications.

AASHTO coordinators have always encouraged and practiced vertical loading. In many states the same frequency is assigned to adjoining towns and cities within a county. This practice has not only resulted in greater frequency reuse, but enhances inter-operability. The effective radiated power, antenna height above average terrain and mobile loading levels are unique for each area of the country. It is our experience that the coordinator is uniquely qualified to assist the Commission in promoting spectrum efficiency.

### Travelers' Information System

Travelers' Information Stations are utilized by our Department, they provide an important service to the motorist. The transmission of traffic, road and weather conditions improves traffic flow, reduces congestion and improves safety. The proposal contained in Part 88.1091(b) to authorize TIS on a secondary basis throughout the Amplitude Modulated (AM) broadcast band has the potential to disrupt the operation of many TIS systems.

We recommend that Rule 88.1091(b) be amended as follows:

TIS will be authorized on a primary basis on 1700 khz nationwide and on a secondary basis to AM broadcast station operation on frequencies between 530 khz and 1690 khz. TIS applicants must protect broadcast assignments in the 530-1690 khz band.

### Automatic Vehicle Monitoring (AVM) Systems

We request the commission consider accommodation of our current statewide standards for Automatic Toll Collection equipment within § 88.1125, AVM Systems. Our equipment operates in the frequency band from 902 MHz to 928 MHz requires 2 MHz bandwidth per channel and utilizes types M1D AND NON emissions. The above subject AVM will be addressed in greater detail in this Departments response to the Commissions Docket PR 93-61.